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Network connection reform lacks ambition, needs rewrite - Sapere

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Sapere says the Electricity Authority's plans to reform network connection processes lack ambition, while also being so ambiguous they should be rewritten.

In a report for Drive Electric on the regulator's proposed code changes to standardise network connection pricing and processes, Sapere directors Stephen Batstone and David Reeve say the proposals do little to signal to distributors that the regulator expects them to improve their performance across all aspects of the connection process.

The authority released the *"Distribution connection pricing - proposed Code amendment "* and '*Network connection project - stage one'* consultation papers in October. It is proposing to fast-track seven changes to distribution networks' connection pricing as a stepping-stone to full reform to improve connection pricing efficiency.

Batstone and Reeve see "some positive progression", with the proposals aiming to set the sector on a path to formulaic and transparent connection pricing.

However, they highlight several issues, including there being no limits on overcharging for new connections, and the way in which the proposals encourage EDBs with lower capital contributions to increase them.

Overall, they say the regulator has "just endorsed the status quo of current connection charges" and that the measures will make little difference for network access seekers in the short term.

"Even the reliance limits on capital contributions still allows every EDB to, at least, do what they currently do."

Rewrite needed

Batstone and Reeve also say the distribution pricing paper was "negatively affected" by confusing and contradictory wording within the proposal, and between the proposal and the proposed code amendments.

"The wording is so confusing that we have had to change our view on what the proposal intends and what the code amendment states many times," they say.

"After carefully going through the authority's distribution connection pricing proposal we are not clear on exactly what the Authority is proposing."

While they developed a "plain-English interpretation" of the papers to base their analysis on, Batstone and Reeve say other interpretations are possible and they were unable to reconcile the Electricity Code wording to the authority's proposal document.

The pair say that while customers' experience of price and access issues are "intimately connected" these were considered to be independent of each other by the authority.

They also note future work on these will occur on different timetables.

"Releasing two separate consultations, developed by different parts of the authority and with scant reference to each other has failed to address this critical connection."

They call for the authority to "be clearer on the exact fast-track proposals, edit the code amendments so that they unambiguously describe what is intended" and then reissue the consultation.

Efficient discovery

A key focus of the authority's fast-track proposals on connection pricing aims to improve the clarity and transparency of connection processes and provide cost-reflective pricing to incentivise network use and make investment choices that lower costs and promote the long-term benefit of consumers.

The authority defined two problems with a customer's ability to assess capacity options at any given location in the network: the limited visibility of network capacity and applications seeking to connect to a network, which can compromise investment decisions; and that access seekers seek available capacity to connect without having to pay for expensive network upgrades.

However, while avoiding expensive network upgrades is "the ideal" it is not necessarily "the goal" for all access seekers, Batstone and Reeve say.

Charger operators want to "discover the most efficient trade-off between price and capacity" - underscoring the importance of capacity and price transparency.

"Key inputs into such a business case are the potential connection locations in an area, the levels of network capacity that can be secured at those locations, the prices at which that capacity can be secured, and what that means for the customer (EV drivers) experience."

Sapere's previous work on charge-point operators' access issues found that key network information in a digital format, which would allow them to focus on sites that would likely be favourable for EV chargers, is rarely available.

That requires operators to explore network connection options via bilateral discussions with EDBs, which can take extended periods of time.

"Unless a CPO can efficiently discover and evaluate price and capacity for any given location, the ability to make an efficient choice will be constrained

by the component that has to be discovered through bilateral discussions," Batstone and Reeve say.

They say while the authority's proposal D - requiring distributors to provide more network capacity information - is an "adequate list" of requirements, it does not specify how the data is made available or whether it would integrate with the Commerce Commission's geospatial requirements, for example.

Distributors could use a variety of formats - spreadsheets, PDF files or Word documents - with no national consistency.

The authority's proposals also do not incentivise distributors to increase their knowledge of network capacity over and above "their status quo efforts" and expect more granular information would be published "only where it is known".

"While the authority argues that these efforts are under way, it offers no evidence of how widespread this is and appears to rely on the fact that 'all

distributors will need a thorough understanding of capacity and power quality on their networks if they are to be efficient'," Batstone and Reeve say.

They call for a single digital and geospatial format, and for the monitoring and reporting of improvement of network information for each EDB.

Extended timeframes

Likewise, they believe access seekers' concerns about response times to requests for the available capacity and pricing information have also been overlooked.

Restricting distributors to only one extension would curb the "unreasonable number of extensions" but with no check on the validity of EDBs' use of them, Batstone and Reeve say.

While some response times are good, "across the country, response times to connection applications are highly variable".

The authority also allows too much leeway around extensions for distributors considering connection applications, Batstone and Reeve say.

While noting distributors cannot control the time required for grid studies, they calculate a medium 69kVA-300kVA connection application could take 150 business days - seven months - even when no grid studies are required.

A large connection - such as two or more fast DC chargers - could see distributors extend the processing time to 285 business days - more than a year.

"While this is a worst-case analysis, we observe that there is no discipline on extensions sought by the EDB," they say.

The requirements imposed on distributors making extensions are also too permissive, they says, with distributors only needing to provide applicants with notice in writing specifying the reasons why the extra time is sought.

"There do not appear to be any tests on the reasonableness of the extension, or the time required, the say.

Batstone and Reeve recommend only one 40-business-day extension should be permitted for final and interim applications, if there is a reasonable requirement from distributors.

"We see no reason why distributors should have to need multiple extensions of timeframes for connections that already meet a set of technical standards."

Encouraging more connection charges

In the short term, the regulator proposes rules for connection enhancement costs and network capacity costs, as well as some limits on costs through ensuring distributors offer the "minimum relevant" scheme for connection.

Over the longer term, it plans to make distribution pricing substantially formulaic.

Batstone and Reeve approve of the authority's intentions: "However, the devil is in the detail, and we are concerned at the authority's apparent bias towards concerns that some connection costs are too low, but none are too high," they say.

The authority wants to bring down the reliance on capital contributions relative to capital expenditure where they are higher than the industry average. But Batstone and Reeve say it "pretty much encourages" distributors with low capital contributions to increase them.

They note the authority believes there are instances of inefficiently low connection charges that it says could result in subsidised connections.

"However, there was no analysis demonstrating that low connection charges are inefficient," Batstone and Reeve say.

"The authority intends that capital contributions will increase over the industry as a whole."

Batstone and Reeve also say the proposed code amendments make "little attempt to control the upper limit on costs" and doubt the proposed rules around connection enhancement costs, network capacity costs and ensuring distributors offer the "minimum relevant scheme" for applicants will improve pricing efficiency.

They believe there may be a "misunderstanding" in the authority's view of a customer's standalone costs compared to the cost of connecting to regulated networks, which could see costs remain too high for new connections in the longer term.

They say the regulator uses an "extremely simplistic definition" of standalone cost, which is the cost of establishing a dedicated transmission connection rather than a distribution one.

Batstone and Reeve say this leads the regulator to conclude that the standalone cost for smaller users connected at the fringe of the network is "typically very high".

They instead point to an analysis of rail-freight network pricing in the US, where the fundamental policy position is that "standalone cost cannot lock in price uplifts due to the monopoly characteristics of a network".

Their concern is that the authority assumes that as standalone costs are "typically very high" and are therefore not applicable except in a few cases, connection charges cannot be too high for most customers.

They also say requiring any connection works to be the "minimum relevant scheme" cost is a "meaningless addition". Distributors would still determine what those connection works are and the minimum relevant scheme design is at their discretion.

Performance monitoring

The authority is also proposing to increase distributors' record-keeping on application approvals or rejections, and the number, duration and justification of each extension sought by themselves and applicants.

However, Batstone and Reeve are "frustrated" that the authority seems to be primarily concerned with monitoring EDBs' pressures of accommodating higher numbers of new connections.

They say performance monitoring should be as much about improving distributor performance as obtaining information about the "plight" of distributors.

"Nowhere is it mentioned that connecting parties, such as CPOs, have absolutely no transparency over whether the timeframes, costs and contractual arrangements are normal."

They are disappointed that no set disclosure framework is included and that there was no indication the authority would seek to establish whether the timeframes are acceptable relative to international standards, or what the authority sees as good.

"There does not appear to be any plan to publish the information so that the relative performance of EDBs can be assessed by connecting parties," they

say.

Batstone and Reeve recommend benchmarking timeframes and requiring distributors to disclose the time taken to process applications annually. That information should be published, as happens with the authority's reporting of gentailers' internal transfer prices.

Cross-submissions on the issue close today.